

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method of heat-shrinking sleeves made from a film of heat-shrink plastics material ~~and engaged individually on articles such as bottles~~, the method comprising ~~the following successive steps~~:

a) placing ~~a single~~ an article on a ~~moving~~ support configured for movement at one or more travel speeds, a heat-shrinking sleeve being engaged on said the article;

b) moving the support at a first travel speed to transfer ~~transferring~~ the article together with ~~its~~ the sleeve into a pre-heater chamber ~~at a controlled~~ having a first temperature range; ~~and~~

~~maintaining said the article in said the pre-heater chamber for a predetermined time duration so as to prepare the film constituting the sleeve in an optimum manner for subsequently shrinking the sleeve onto the article;~~

e) moving the support vertically at a second travel speed to pass ~~passing~~ the article together with ~~it's~~ the sleeve ~~at a controlled speed through~~ from the pre-heater chamber to a shrinkage chamber at a controlled having a second temperature range, the shrinkage chamber being adjacent to the pre-heater chamber, thereby causing the sleeve to shrink onto the article; and

d) removing the article coated in its shrunk-on sleeve from the support.

2. (Currently Amended) A method according to claim 1, further comprising controlling wherein the a set of parameters of including at least one of the first and second temperature ranges, at least one of the first and second travel speed speeds of the support, and the time are controlled as a function of the article in question and of the film constituting the sleeve in question.

3. (Currently Amended) A method according to claim 2, wherein the set of parameters are controlled by a programmable controller ~~governing the sequences of operations implemented in said method.~~
4. (Currently Amended) A method according to claim 1, wherein the ~~heating obtained~~ temperature range in the pre-heater chamber is obtained by the effect of radiation.
5. (Currently Amended) A method according to claim 1, further comprising blowing and diffusing hot air into ~~wherein the temperature that exists inside the shrinkage chamber is~~ to obtain the second temperature range obtained by blowing in hot air and by diffusing the blown in air.
6. (Currently Amended) A method according to claim 5, further comprising using ~~wherein the air exiting blown into the shrinkage chamber is~~ to maintain ~~also made use of periodically for maintaining the desired~~ first temperature range inside the pre-heater chamber.
7. (Currently Amended) A method according to claim 1, wherein ~~the movement of the moving~~ the support while transferring to transfer the article into the pre-heater chamber and ~~while causing said~~ moving the support to pass ~~the article to pass~~ through the shrinkage chamber takes place along a single vertical axis direction.

8. (Currently Amended) A method according to claim 7, further comprising revolving ~~wherein the support is caused to revolve~~ at a controlled rotational speed about a the vertical axis both before and during the passage of the article together with its sleeve through the shrinkage chamber.

9. (Currently Amended) A method according to claim 7, wherein at least one of the first travel speed and the second travel speed vary ~~the moving support is caused to move axially at varying speed~~ in order to optimize the duration of a complete cycle.

10. (Currently Amended) A heat-shrink machine for heat-shrinking sleeves made from a film of heat-shrink plastic material onto an article ~~implementing a method according to claim 1~~, the machine comprising:

[-] a stationary machine structure;

a shrinkage chamber having a temperature range, the shrinkage chamber being mounted to the stationary machine structure;

a pre-heater chamber surmounting the shrinkage chamber;

[-] an article support mounted to move at a travel speed relative to the stationary structure along a vertical ~~central~~ axis between a low position for installing or removing ~~an~~ the article, and a high position in which the article is fully contained in a the pre-heater chamber for a time ~~surmounting a shrinkage chamber;~~ and

[-] a controller to control ~~governing the parameters of~~ temperature range of the shrinkage chamber, the travel speed of the support, and the time during ~~the sequences of operations of the method.~~

11. (Currently Amended) A machine according to claim 10, wherein the article support is configured to revolve ~~mounted to be capable also of revolving about its own central~~ the vertical axis.
12. (Currently Amended) A machine according to claim 10, wherein the article support is arranged to center the ~~supported~~ article on the vertical ~~central~~ axis, and ~~possibly also to protect all or part of the~~ a bottom zone of ~~said the~~ the article.
13. (Currently Amended) A machine according to claim 10, wherein the pre-heater chamber includes ~~is constituted by~~ a radiant chimney carried by the shrinkage chamber and centered on the vertical ~~central~~ axis of the article support.
14. (Currently Amended) A machine according to claim 13, wherein the radiant chimney has at least one of a ~~is of~~ variable wall thickness and ~~/or a~~ variable cross-section ~~in the event of there being significantly different shrinkage percentages between bottom and top zones of the sleeve to be shrunk onto the~~ article.
15. (Currently Amended) A machine according to claim 10, wherein the shrinkage chamber is annular in structure, and is centered on the vertical ~~central~~ axis of the article support.
16. (Currently Amended) A machine according to claim 15, wherein the annular shrinkage chamber receives blown-in air from ~~is connected via a tube to~~ a hot air blower assembly, the shrinkage chamber including ~~and includes~~

components ~~serving~~ to diffuse the blown-in air and ~~said chamber having~~ a cylindrical inside wall presenting at least one slot for delivering the diffused hot air.

17. (Currently Amended) A machine according to claim 16, wherein the inside wall of the annular shrinkage chamber presents a plurality of slots which are inclined relative to the horizontal.

18. (Currently Amended) A machine according to claim 16, wherein the components for diffusing the blown-in air include ~~are constituted by~~ strips of metal wool.

19. (Currently Amended) A machine according to claim 16, including an elevator secured ~~firstly~~ to the article support which is mounted to be capable also of revolving about its own central vertical axis[,] and ~~secondly~~ to a first motor for causing ~~said the~~ article support to revolve at a rotational speed around the vertical axis, together with and a second motor actuating said the elevator in order to cause the article support to move vertically axially, and wherein the controller of ~~said the~~ machine is connected to ~~said two the first and second~~ motors and to the hot air blower assembly associated with the annular shrinkage chamber in order to govern the ~~various parameters of~~ temperature range of the shrinkage chamber, the travel speed of the support along the vertical axis, the rotational speed of the support around the vertical axis[,] and the time.

20. (Currently Amended) A machine according to claim 19, wherein the controller is programmed as a function ~~programmable specifically to take~~

~~account~~ of the dimensions of the article, ~~in question and~~ the temperature of ~~said~~
~~the~~ article when it is ~~put into place in said machine~~ placed on the support, and
~~also to take account of~~ the thickness and the ~~nature~~ material of the film
constituting the sleeve ~~in question~~.

21. (Currently Amended) A machine according to claim 10,
including a protective cover with a window enabling the article to be ~~put into~~
~~place~~ placed on and removed manually from the support, the protective cover
reducing a ~~without any~~ risk of an operator touching hot parts of ~~said~~ the
machine.